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Shaw™ Shaw Environmental, Inc.

January 28, 2008

Mr. Keith Casanova, Administrator
Louisiana Department of Environmental Quality
Environmental Assessment Division
P.O. Box 4314
Baton Rouge, Louisiana 70821-4314

Re: Response to Comments
Remedial Activities and Site Closure Report
Former 7700 Earhart Boulevard Facility
New Orleans, Louisiana
Agency Interest No.: 1275

Dear Mr. Casanova:

On behalf of TH Agriculture and Nutrition (THAN) and Elementis Chemicals, Inc. (Elementis), formerly known as Harcros Chemicals, Inc., Shaw Environmental and Infrastructure, Inc. (Shaw) is responding to comments provided by Wilma Subra and the Louisiana Department of Environmental Quality (LDEQ) regarding the October 2007 Remedial Activities and Site Closure Report. Comments were provided by Subra Company (Subra) in letter correspondence to the LDEQ dated December 4, 2007. LDEQ comments were provided to Shaw via email correspondence dated December 26, 2007.

The comments provided by Subra and the subsequent responses are as follows:

1. **On page 3-3 (page 19 of 78), the Remedial Report indicates that the construction and demolition debris from the Warehouse was disposed of at the River Birch, Inc. facility in Garyville, LA.**
   In section 3-7 (page 28 of 78) the 5,867 tons of construction and demolition debris waste was listed as being disposed of in the River Birch Landfill in Jefferson Parish.
   In Table 3-1 on page 45 of 78, the construction and demolition debris waste consisted of 1,245 tons of construction and demolition debris from the warehouse, 2,465 tons of debris from the warehouse slab and 2,157 tons of asphalt and limestone cover material and were listed as being disposed of in the River Birch Landfill in Garyville.

Garyville is located in St. John the Baptist Parish. The River Birch Landfill is located in Jefferson Parish not Garyville. The report must be corrected to reflect the correct location of the landfill that was used to dispose of the Construction and Demolition Debris from the Thompson Hayward site.

Response:
The report will be revised to reflect the correct location of the landfill which was River Birch Landfill located in Waggaman, Jefferson Parish, Louisiana. Page 3-3 and Table 3-1 have been revised and are included as Attachment 1 (Addendum One) of the Remedial Activities and Site Closure Report. The pages included as Addendum One are to replace the pages initially included in the October 2007 report.

2. **The Thompson Hayward site contained eight on-site monitoring wells. During Plugging and Abandonment operations, four of the on-site wells (MW-1S, MW-11, MW-21, and MW-102S) had the casings left in place and were grouted. Will the locations of the four wells with the remaining casings be identified in the property records Conveyance Notification in order to alert future site developers of their locations?**

   Response:
   The locations of properly plugged and abandoned monitor well locations are not a requirement of the conveyance notification. However, a reference to the Remedial Activities and Site Closure Report, which documents the locations of the former well locations, will be included in the conveyance notification.

3. **After excavation activities, PCE remained in Area II soils (former herbicide blending area south of warehouse near Pine Street) below the Remedial Action Level. The oxidizing agent Potassium Permanganate was used to mitigate the remaining PCE (page 23 of 78). Potassium Permanganate (450 pounds) was manually applied – spread by hand to the bottom and Pine Street side wall of the excavation in Area II. Potassium Permanganate was also applied between Area II and Pine Street by use of hand auger borings. Will the areas where Potassium Permanganate was applied by noted in the property records Conveyance Notification in order to alert future site developers?**

   Response:
   Remedial activities are not a requirement of the conveyance notification. However, consistent with the response to the previous question, a reference to the Remedial Activities and Site Closure Report documenting the use of potassium permanganate as an oxidizing agent will be included in the conveyance notification.

4. **Beginning on page 100 of 456 in Volume 2, Appendix B of the Remedial Report and extending through page 126 of 456, photo documentation was provided of the**

remedial activities as it progressed. On each page the photographs are dates as October 2006 – August 2007. It would be very beneficial if each photograph was listed with actual date and time the photograph was taken rather than just October 2006 – August 2007. When reviewing the results of the air monitoring records, when detectable levels of chemicals were detected in the air, it would be helpful to be able to refer to the photographs to determine what type of on site activities were occurring at the time of the detections of the chemicals. In some cases the air reports contain notes concerning on going activities such as cutting on rail cars (Area I Former Pesticide Blending Area, contained underground storage tanks that were actually two former rail cars see page 3-8, 24 of 78 in Volume I and photograph on Page 114 of 456 in Volume II), but the ability to refer to the photographs closest to the chemical events recorded in the air monitoring reports is not possible. The date and time of each photograph should be included with each photograph in Volume II. This would assist in reviewing other portions of the remedial report.

Response:
The entire photographic documentation obtained throughout the course of Remedial Activities at the Earhart Boulevard Facility was not recorded by the date and time in which the photographs were taken but within the timeframe of the event being documented. Therefore, there is no way to identify the exact date and time that each photograph was taken.

The comments provided by the LDEQ and the subsequent responses are as follows:

1. **There is no data in the cd submitted as Appendix G.**

   Response:
   Due to the volume and size of the analytical laboratory report files (approximately 1.7 gigabytes) the disc included as Appendix G is in digital video disc (DVD) format and is not compatible with standard compact disc (CD) drives. Three copies of Appendix G will be made in CD format (three separate discs per copy) and submitted to the LDEQ to accompany the DVD copies included in LDEQ and repository copies of the report.

2. **In Section 2.2, line 4, tetrachloroethene is mis-identified as tetrachloroethane**

   Response:
   Page 2-1 has been revised and is included as Attachment 1 (Addendum One) of the Remedial Activities and Site Closure Report. The pages included as Addendum One are to replace the pages initially included in the October 2007 report.

3. **Don't you think it will be ok to also mention the new fence in section 5.0 as a part of restoration activities?**

Response:
Yes. Section 5.4, page 5-2 has been revised and is included as Attachment 1 (Addendum One) of the Remedial Activities and Site Closure Report. The pages included as Addendum One are to replace the pages initially included in the October 2007 report.

If you require additional information, please do not hesitate to contact me at (225) 987-7326.

Sincerely,
Shaw Environmental, Inc.

Kenneth P. Romero, P.G.
Project Manager

Attachments

SPD
c.c. Edwin Akujobi, LDEQ
Jack Cleary, THAN
Dwayne Johnson, Kean, Miller, Hawthorne, D'Armond, McCowan & Jarman LLP
Michael Potts, ENVIRON International Corporation
Larry LeJuene, Louisiana Department of Agriculture and Forestry
Wilma Subra, Subra Company

Attachment 1
Remedial Activities and Site Closure Report Addendum One

2.0 Background

2.1 Site History

The site is currently owned by Elementis. Available records indicate Thompson-Hayward Chemical Company (THCC) first occupied the Facility as early as 1931. Operations in 1931 appeared to be restricted to the property identified by the former warehouse, land square 461. THCC purchased squares 461 and 462 from Gaylord Container Company in February of 1941. According to site records, pesticide-related operations were initiated at the site during the 1940's with small-scale dry formulation of pesticide products. Liquid formulation was added during the 1950's. The pesticide formulation operations continued through the 1960's until 1977 when all forms of pesticide formulation ended. From 1977 to 1988, industrial activities on the site consisted of the bagging of soda ash material and the warehousing and distribution of several industrial chemicals. These chemicals included dry cleaning fluids and commercial pest control products. All industrial/commercial activities ended at the site in 1988. Since then, the property has remained unoccupied.

2.2 Previous Environmental Activities

Environmental activities at the site began in 1987 with the detection of dry-cleaning related chemicals in the Sewerage and Water Board of New Orleans (SWBNO) drainage system. In March of 1988, the LDEQ issued a compliance order to the owners and operators of the site to address the detections of tetrachloroethene (PCE), trichloroethene, 1,1,1-trichloroethane, and 1,2-dichloroethene in the city's storm sewer system. A related environmental site assessment of the facility was also conducted in 1988 and it indicated impacts to on-site soil by past pesticide formulation activities as well as dry cleaning chemical storage activities. The facility's cooperation with LDEQ culminated in the issuance of a joint LDEQ and LDAF compliance order on May 8, 1989 to THAN and Elementis to implement a Remedial Action Plan (RAP) and a Groundwater Quality Assessment Plan (GQAP). These actions were implemented in 1989 and 1990. The resulting interim remedial action included:

- Removal and plugging of on-site storm drains and the plugging of sewer lines that leave the property;
- Demolition and off-site disposal of the mixing plant building located in the northwestern section of the site;
- Demolition and off-site disposal of all above ground tanks;
- Excavation of most of the soil areas and off-site disposal of generated debris and soil media;
- Backfilling of excavated areas with clean fill; and

and demolition debris generated during this phase of remedial activities was disposed of at River Birch Landfill in Waggaman, Jefferson Parish, LA. Pea gravel and other material vacuumed from the roof were disposed of at Chemical Waste Management in Sulphur, Louisiana.

Warehouse activities spanned approximately seven weeks, from the middle of October until the end of November. Activities began with SEMS vacuuming pea gravel and dirt/sediment off of the roof into vacuum boxes. Vacuuming removed the bulk of the material but a significant amount of residual pea gravel remained. The ICI crew then swept the roof with industrial brooms to accumulate remaining loose material which was then vacuumed into closed waste containers. As a preventative measure, to avoid a potential dust release during demolition, latex paint was used to coat the roof surface encapsulating the remaining pea gravel and dust particles. Upon completion of the initial roof removal and encapsulating activities, SEMS first removed a section of the wall on the Burdette Street side to facilitate roof removal. In an effort to minimize dust emissions the warehouse roof was then taken down in pieces. The debris was collected in roll off boxes. After the roof had been completely removed, SEMS began taking down the brick walls. As with the roof material, once the walls were down, the debris was collected in roll off boxes. The concrete slab was left in place throughout the remediation activities and then removed and disposed during the final site grading. Also, throughout the demolition process, fire hoses supplied with potable city water were used to suppress dust particulates.

During the warehouse demolition process approximately 71 tons of roof pea gravel and dust were removed from the roof, 3,710 tons of construction debris was sent off-site for disposal, and 187 tons of steel was recycled. A summary of waste generated by the demolition of the warehouse building for off-site disposal is summarized in Table 3-1. Details of the construction and demolition debris transportation and disposal activities are further described in Section 3.7.

Throughout the warehouse demolition process, particulate air monitoring was conducted around the perimeter of the work area to ensure that remedial activities did not cause a nuisance to the surrounding community. The results of the particulate air monitoring are included as Appendix D.

3.4 Monitor Well Plugging and Abandonment

3.4.1 Offsite Monitor Well P&A

The plugging and abandonment (P&A) of 12 offsite monitor wells and 8 offsite piezometers (MW-P6 through MW-P13, MW-6D, MW-6l, MW-7D, MW-7l, MW-8D, MW-8l, MW-9D, MW-9l, MW-10l, MW-11l, MW-12D, and MW-12l) was conducted by Professional Technical Support Services, Inc. (Pro-Tech) in July 2005. The former offsite piezometer and monitoring well locations are shown on Figure 3-1. An unsuccessful attempt was made to remove the well casing from each location and LDEQ approval was granted to plug each well in place. The wells were grouted in place with a cement/bentonite mixture weighing approximately 13.8 pounds per

Material used for topsoil was obtained from the Bonne Carre Spillway and consisted primarily of a silt and clay mixture. Geotechnical and chemical analyses were performed on the topsoil source prior to the introduction of the material to the site. Analytical and geotechnical analysis results from the collected backfill samples can be found in Appendix L. Photographic documentation of topsoil and grading operations are included in the photo log included as Appendix B. A final grading as built map is included as Figure 5-1.

5.4 Sidewalk Replacement

Once final grading was completed, sidewalks were placed around the perimeter of the site; excluding the Earhart Boulevard side, which never contained a sidewalk. Final sidewalk locations are depicted on Figure 5-1. The sidewalks placed around the facility's perimeter were constructed in accordance with the City of New Orleans, Louisiana Department of Public Works *General Specification for Street Paving 1999 Edition (Revised 10/1/2001).* In addition, the perimeter fence was also replaced including a sliding gate placed near the corner of Earhart Boulevard and Burdette Street.

Table 3-1
Waste Summary
7700 Earhart Boulevard
New Orleans, Louisiana
Agency Interest No.: 1275

Waste/Media Type	Total Material Disposed (tons/gals)	Facility	Disposal Method	Profile Number(s)
1) Recycled Material				
A. Warehouse Steel Support Beams	187	Southern Scrap and Recycling, Westwego, LA	Recycle	NA
2) Non-Hazardous Construction and Demolition Waste				
A. Non-Friable ACM Demolition Debris	1245	Riverbirch Landfill, Waggaman, LA	Non-Hazardous Landfill	3883
B. Warehouse Concrete Slab	2465	Riverbirch Landfill, Waggaman, LA	Non-Hazardous Landfill	3883
C. Asphalt and Limestone Cover	2157	Riverbirch Landfill, Waggaman, LA	Non-Hazardous Landfill	3896
Total	5867			
3) Hazardous Solids				
A. Warehouse Roof Pea Gravel	71	Chemical Waste Management, Sulphur, LA	Hazardous Landfill	ZW645794
B. Soil & Sediment	4830	Clean Harbors, Deer Park, TX Clean Harbors Kimball, NE	Incineration	CH211201B
C. Debris (concrete, ufs, etc.)	723	Clean Harbors, Lone Mountain, OK	Micro-encapsulation	CH211201B
D. Carbon	14	Clean Harbors, Deer Park, Texas	Incineration	CH211201B
Total	5638			
4) Hazardous Liquid Waste				
A. Water	106,396	Clean Harbors, Deer Park, TX Clean Harbors, Baton Rouge, LA	Incineration Treatment and Discharge	CH211217B